

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



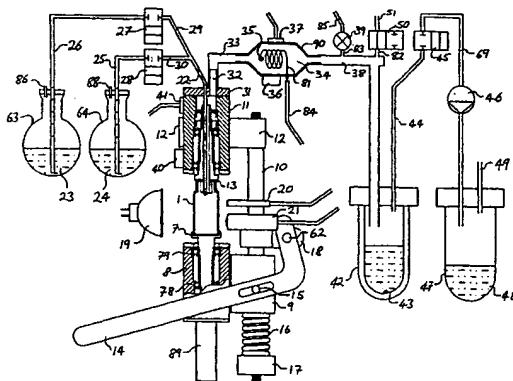
(43) International Publication Date  
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number  
**WO 2005/065799 A1**

- (51) International Patent Classification<sup>7</sup>: **B01D 1/22**,  
1/00, B04B 15/08, 15/02
- (21) International Application Number:  
PCT/GB2005/000008
- (22) International Filing Date: 6 January 2005 (06.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
0400192.1 6 January 2004 (06.01.2004) GB
- (71) Applicant (for all designated States except US):  
VAPOURTEC LIMITED [GB/GB]; Place Farm, In-  
gham Suffolk IP31 1NQ (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): GUTHRIE, DUN-  
CAN [GB/GB]; Wren Cottage, Tye Green, Alpheton  
Suffolk CO10 9BW (GB).
- (74) Agents: HODSDON, Stephen et al.; Mewburn Ellis LLP,  
York House, 23 Kingsway, London Greater London WC2B  
6HP (GB).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: SOLVENT EVAPORATOR



(57) Abstract: An apparatus for concentrating solutions in a vaporising receptacle (1) is provided wherein the receptacle (1) has a mouth (3), and the axis of the receptacle is perpendicular to the mouth. The apparatus comprises: support means (7) for supporting the vaporising receptacle with the mouth of the receptacle uppermost and the axis substantially vertical; rotation means (89) being operable to rotate the vaporising receptacle at high speed substantially about the axis; means (13) for sealing the vaporising receptacle to the apparatus; a vacuum pump (46) to reduce the pressure within the vaporising receptacle; means (22) for dispensing into the vaporising receptacle a solution to be concentrated; sensing means (21) to measure the temperature of the solution within the vaporising receptacle; heating means (19, 99) to apply heat to the solution within the vaporising receptacle; a control and regulating unit (75) for controlling or regulating at least one of said rotation means, said vacuum pump, said dispensing means, said sensing means and said heating means. The invention allows low pressure evaporation in regularly sized and shaped receptacles without bumping, and is also easy to use. A corresponding method is provided.

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